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LATE DIST

Brianda Negrete

From:	Calvin Rossi <Calvin.Rossi@sce.com>
Sent:	Monday, October 3, 2022 12:57 PM
To:	jhartman@coutyofsb.org; Supervisor Das Williams; Hart, Gregg; Nelson, Bob; Lavagnino, Steve
Cc:	sbcob; Joshua Public Affairs Torres; Natalie N Yanez
Subject:	Building Electrification Ordinance - Agenda Item 22-00883
Attachments:	SCE Support Letter for Co. of Santa Barbara_Oct 2 2022.pdf
Categories:	Public Comment

Chair Hartman:

Please find the attached letter submitted on behalf of Southern California Edison (SCE) regarding Agenda Item 22-00883 - Consider recommendations regarding a Building Electrification Ordinance. If implemented, a building electrification ordinance can be a very cost-effective way for local governments to achieve meaningful greenhouse gas reductions and help it achieve its climate and air quality goals.

For the reasons outlined in the attached letter, we strongly encourage the County of Santa Barbara to develop a building electrification ordinance with as few exemptions as possible.

Thanks in advance for your consideration!

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October 3, 2022

County of Santa Barbara Board of Supervisors
County Administration Building
105 E. Anapamu Street
Santa Barbara, CA 93101-2000

Dear Honorable Members of the Board of Supervisors,

I am writing on behalf of Southern California Edison (SCE) regarding Agenda Item 22-00883 – Consider recommendations regarding a Building Electrification Ordinance. A building electrification ordinance can be a very cost-effective way for local governments to achieve meaningful greenhouse gas reductions and help it achieve its climate and air quality goals. We strongly encourage the County of Santa Barbara to develop a building electrification ordinance with as few exemptions as possible. SCE offers the following points in support of the ordinance:

1. Buildings are a major source of emissions in California.
2. Modern electric technologies are very efficient and often are demand response capable.
3. Studies1 have shown that the lifetime costs for all-electric homes are either the same as or less expensive than mixed-fuel homes for a large majority of Californians.
4. SCE is modernizing and hardening our distribution system, increasing reliability and resiliency – the grid is ready to support all electric buildings.
5. Our efforts to strengthen the grid and add energy storage are paying off as evidenced by the State's ability to avoid rotating outages in the most recent record heat wave.

And perhaps most importantly, in order to meet the State's climate goals, our studies have shown that 70% of buildings need to be electrified as soon as possible.

BACKGROUND

Buildings are a major source of emissions in California – for both local air quality and greenhouse gases. Importantly, buildings have decades-long lifespans, so when they are built with fossil fuel infrastructure, we are locking in multiple decades of additional fossil fuel emissions.

We are committed to serving the needs of California's clean energy future, as outlined in our recent paper, Reimagining the Grid. This requires a grid that supports high levels of carbon-free resources, integrates new technologies and services, and remains safe, reliable, affordable and resilient even as the climate continues to evolve. **SCE is modernizing and hardening our distribution system**, leveraging increasingly sophisticated hardware and software to manage a complex and intelligent grid. This will not only help enable greater adoption of clean energy technologies, but it will also improve general reliability while making the grid more resilient to threats exacerbated by climate change such as wildfires and heatwaves. We are investing approximately $5 billion annually to build a grid that customers can rely upon to support

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the clean energy future. Customer-owned resources like rooftop solar and battery storage offer an additional level of resiliency. We estimate by 2045 about half of single-family homes in our service territory will have some combination of solar and storage. Due to Title 24, all new residential construction will have solar and be energy storage ready, and most new commercial will also have solar.

Serving the electrical needs of an all-electric building is not a significant concern compared to a mixed-fuel building. We design the electric grid to accommodate peak demand, which in most areas is driven by air conditioning load. Studies have shown the peak demand from all-electric neighborhoods is not significantly higher than the peak demand from mixed-fuel neighborhoods. This is because **modern electric technologies are very efficient and often are demand response capable**, meaning they can avoid or minimize usage during on-peak hours when stress on the grid is greatest. All of this translates into all-electric homes have a "flatter" electricity demand profile. So, while they consume more electricity overall, all-electric homes place that demand on the grid more evenly throughout the day, which means we don't need significant upgrades to the grid specifically for all-electric buildings.

We appreciate many customers have concerns about rotating outages given the recent heat storm. The August 31-September 9, 2022 heat wave was twice as long as the August 2020 event. We set a new statewide peak demand record and were also simultaneously dealing with a tropical storm that reduced solar output, yet we did not have to implement rotating outages**. Our efforts to strengthen the grid are paying off.** With climate change, more extreme weather including intense and longer heat waves are expected in the coming decades. SCE, in partnership with state energy regulators, has been and will continue to work on a variety of solutions to address the region's long-term reliability needs. For example, compared to August 2020, SCE has increased the amount of utility-scale energy storage by a factor of 22. We now have almost 1,400 megawatts of energy storage online, with hundreds more megawatts expected to come online in 2023 and even more in subsequent years.

All-electric new construction is affordable to build and operate. There are many affordable, clean, efficient all-electric options for water heating, space heating, clothes drying, and cooking, all of which can be powered by carbon-free electricity. Even though fossil fuels are often less expensive per unit of energy than electricity, electric technologies are significantly more efficient, meaning the total cost to operate electric technologies is the same as or less expensive than combustion technologies to operate. **Studies[1] have shown that the lifetime costs for all-electric homes are either the same as or less expensive than mixed-fuel homes for a large majority of Californians.** Although, in coastal communities, like Santa Barbara County, studies show a slight increase in cost for all-electric construction. This is due to the baseline case not already having air conditioning, but then adding it through the installation of a heat pump HVAC. HVAC heat pumps provide both heating and cooling, which make them less expensive to install than a separate furnace and air conditioner, which is especially important for coastal communities trying to adapt to a warming climate.

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CONCLUSION

SCE is excited to partner with the County of Santa Barbara in addressing the climate crisis. Emissions from the building sector are important to address if we are to meet the County's and State's climate goals. We strongly urge the Board of Supervisors to direct staff to draft a strong building electrification ordinance. We look forward to our continued partnership. The future is electric.

Sincerely,

Cal Rossi
Government Relations Manager

Attachments:
Reliability FAQ
Unincorporated Santa Barbara County District 1 Reliability Report
Unincorporated Santa Barbara County District 2 Reliability Report
Unincorporated Santa Barbara County District 3 Reliability Report

[1]Energy + Environmental Economics (E3), *Residential Building Electrification in California*, 2019